

### ABSTRACT

A self-contained system which converts nitrous oxide to a breathable gas mixture of nitrogen and oxygen. In the preferred embodiment of the present invention, a portable system is disclosed wherein liquefied nitrous  
5 oxide is converted to a breathable gas mixture of nitrogen and oxygen. The decomposition occurs over a catalyst bed which is all contained in a small reactor. The invention is useful for underwater, fire fighting and outer space applications.

DENVER:0829551.03